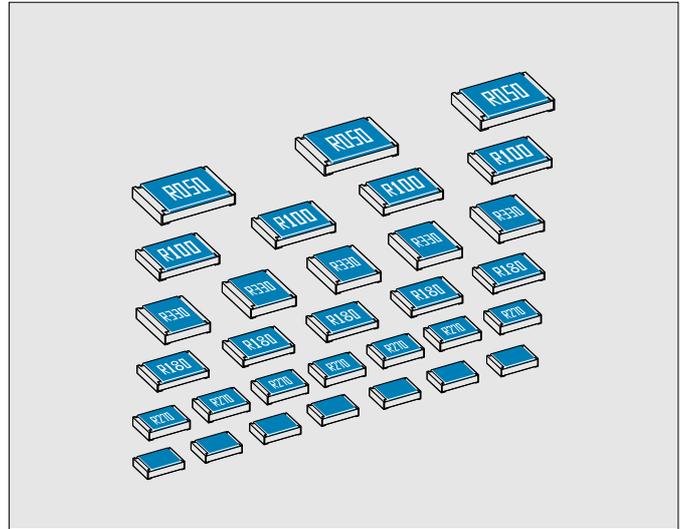


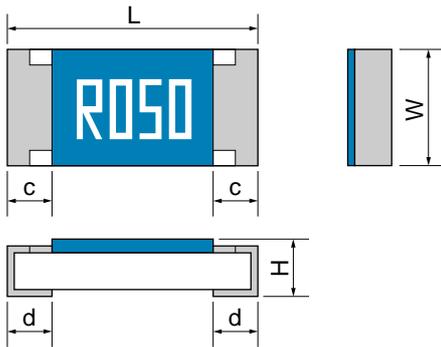
RLC16, 20, 32, 35, 50, 63

●Features

1. Most suitable in a detection of current in power source circuits, motor circuits, etc.



●Dimensions



Resistance is marked with 4-digits on the over coating. (RLC16-RLC63)
Please contact KAMAYA for marking of RLC16.

Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
RLC16	1608	0603	1.6±0.1	0.8 ^{+0.15} _{-0.05}	0.45±0.10	0.3±0.1	0.3±0.1	2mg
RLC20	2012	0805	2.0±0.15	1.25±0.10	0.6 ±0.1	0.4±0.2	0.4±0.2	5mg
RLC32	3216	1206	3.1±0.2	1.6 ±0.15	0.6 ±0.1	0.5±0.25	0.3 ^{+0.2} _{-0.1}	9mg
RLC35	3225	1210	3.1±0.2	2.5 ±0.15	0.6 ±0.15	0.5±0.25	0.3 ^{+0.2} _{-0.1}	16mg
RLC50	5025	2010	5.0±0.2	2.5 ±0.15	0.6 ±0.15	0.6±0.2	0.6±0.2	25mg
RLC63	6332	2512	6.3±0.2	3.2 ±0.15	0.6 ±0.15	0.6±0.2	0.6±0.2	40mg

Unit : mm

*Values for reference

●Product Classification

Example

RLC 20 K R470 F TP
 ① Product Type ② Size ③ Temperature Coefficient of Resistance ④ Rated resistance ⑤ Tolerance on Rated Resistance ⑥ Packaging

① Product Type			② Size			③ Temperature Coefficient of Resistance			④ Rated resistance		⑤ Tolerance on Rated Resistance		*⑥ Packaging		
Code	Metric	Inch	Code	Temperature Coefficient of Resistance	Code	Temperature Coefficient of Resistance	e.g: R050=50m ohm	4Digit	Code	Tolerance on Rated Resistance	Code	Packaging	Application		
16	1608	0603	K	±100×10 ⁻⁶ /°C			R100=100m ohm		F	±1%	B	Bulk(Loose Package)	All Styles		
20	2012	0805	-	0~+200×10 ⁻⁶ /°C			1R00=1 ohm		G	±2%	TP	Paper Tape.	RLC16 ~RLC32		
32	3216	1206		0~+250×10 ⁻⁶ /°C					J	±5%	TE	Embossed Tape.	RLC35 ~RLC63		
35	3225	1210													
50	5025	2010													
63	6332	2512													

*Refer to Taping and Packaging information in page 34.35

FIXED THICK FILM CHIP RESISTORS; RECTANGULAR TYPE & LOW OHM RLC16, 20, 32, 35, 50, 63

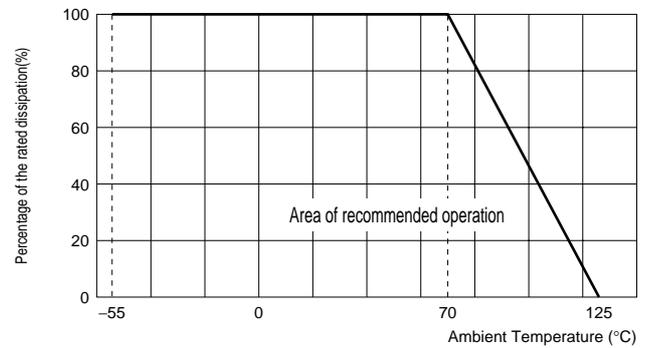
●Ratings

Style	Rated Dissipation at 70°C W	Rated Current Range A	Rated Resistance	Combinations of Rated Resistance Range and Temperature Coefficient of Resistance		Tolerance on Rated Resistance	Isolation Voltage V	Category Temperature Range °C
				Rated Resistance Range	Temperature Coefficient of Resistance 10 ⁵ /°C			
RLC16	0.125	0.19 ~1.11	100m ohm-3.3 ohm	50m ohm≤R<200m ohm 200m ohm≤R<470m ohm 470m ohm≤R 3.3 ohm	0~ +250 0~ +200 ±100	F(±1%) G(±2%) J(±5%)	100 500	-55~+125
RLC20	0.25	0.27 ~2.23						
RLC32	0.5	0.38 ~3.16						
RLC35	0.66	0.44 ~3.63						
RLC50	0.75	0.47 ~3.87						
RLC63	1.0	0.55 ~4.47						

Note.1 Rated Current = $\sqrt{(\text{Rated Power})/(\text{Rated Resistance})}$
 Note.2 Rated Voltage = $\sqrt{(\text{Rated Power})\times(\text{Rated Resistance})}$.(d.c. or a.c. r.m.s. Voltage)

●Derating Curve

The derated values of dissipation at temperature in excess of 70°C shall be as indicated by the following Curve.



●Climatic Category

55/125/56

Lower Category Temperature -55°C
 Upper Category Temperature +125°C
 Duration of the Damp heat, Steady-State Test 56days

●Rated Resistance

Resistance	Code										
50m ohm	R050	90m ohm	R090	0.20 ohm	R200	0.43 ohm	R430	0.75 ohm	R750	1.6 ohm	1R60
56m ohm	R056	0.10 ohm	R100	0.22 ohm	R220	0.47 ohm	R470	0.80 ohm	R800	1.8 ohm	1R80
60m ohm	R060	0.11 ohm	R110	0.25 ohm	R250	0.50 ohm	R500	0.90 ohm	R900	2.0 ohm	2R00
65m ohm	R065	0.12 ohm	R120	0.27 ohm	R270	0.56 ohm	R560	1.0 ohm	1R00	2.2 ohm	2R20
68m ohm	R068	0.13 ohm	R130	0.30 ohm	R300	0.60 ohm	R600	1.1 ohm	1R10	2.4 ohm	2R40
70m ohm	R070	0.15 ohm	R150	0.33 ohm	R330	0.65 ohm	R650	1.2 ohm	1R20	2.7 ohm	2R70
75m ohm	R075	0.16 ohm	R160	0.36 ohm	R360	0.68 ohm	R680	1.3 ohm	1R30	3.0 ohm	3R00
80m ohm	R080	0.18 ohm	R180	0.40 ohm	R400	0.70 ohm	R700	1.5 ohm	1R50	3.3 ohm	3R30

Note.3 Other nominal resistance are also available, please contact KAMAYA for further information.

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements	Test Methods
Voltage proof	No breakdown or flashover R≥1G ohm	Clause 4.7 RLC20-63 100Va.c.,60s RLC16 500Va.c.,60s
Variation of resistance with temperature	See Ratings Table	Clause 4.8 Measuring temperature : +20°C/+125°C/+20°C
Overload	ΔR≤±1% No visible damage, legible marking	Clause 4.13 The applied voltage shall be 2.5 times of Rated Voltage, or equivalent current 2s.
Solderability	In accordance with Clause 4.17.4.5	Clause 4.17 235°C, 2s
Resistance to soldering heat	ΔR≤±1%	Clause 4.18 After immersion into the flux, the immersion into solder shall be carried out in solder bath at 260°C for 5s.
Rapid change of temperature	ΔR≤±1% No visible damage	Clause 4.19 5 cycles between -55°C and +125°C.
Climatic sequence	ΔR≤±5% No visible damage	Clause 4.23 Dry/Damp heat(12+12h cycle), first cycle/ Cold/Damp heat(12+12h cycle), remaining cycle./ D.C.Load.
Damp test, steady state	ΔR≤±5% No visible damage, legible marking	Clause 4.24 40°C 95%R.H. 56 days, test a) of Clause 4.24.2.1
Endurance at 70°C	ΔR≤±5% No visible damage	Clause 4.25.1 Rated current, 1.5h "ON", 0.5h "OFF", 70°C, 1000h.
Endurance at the upper category temperature	ΔR≤±5% No visible damage	Clause 4.25.3 125°C, no-load, 1000h
Adhesion	No visible damage	Clause 4.32 5N, 10s
Bend strength of the face plating	ΔR≤±1%	Clause 4.33 Amount of bend : RLC16-35 3mm, RLC50-63 1mm